

TECHNOLOGY CENTRE SYSTEMS PROGRAMME (TCSP)

NATIONAL COMPETITIVE BIDDING (NCB) NCB No: AB-30028/12/2016/AB Section II-DCMSME/TC-BW-Baddi

Procurement of Works

For

Construction of Boundary Wall, Guard Room & Gate for Technology Centre Baddi, Himachal Pradesh

Office of the Development Commissioner (MSME)
Ministry of Micro, Small and Medium Enterprises,
Government of India,
Nirman Bhawan, Maulana Azad Road, New Delhi-110108.
India

Issued On: 01/04/2016

Table of Contents

Invitations For Bids (IFB)	3
Instructions to Bidders (ITB)	5
SECTION - A	5
SECTION - B	11
Qualification Information	12
Bid Form	14
Letter Of Acceptance	15
Draft Contract Agreement form	
Special Conditions of the Contract	22
Annexure I-A	25
Bill of Quantities (BOQ)	25
Additional Specifications:	46
Annexure I-B	63
Drawings	63
Annexure - 2	64
Format of certificate	64
Form of Bid Security (Bank Guarantee)	65
Performance bank guarantee	68
Section C. World Bank Policy on Corrupt and Fraudulent Practices	69
Section D: Annexures.	71
Annexure: A	
Format for Work performed as prime Contractor (in the same Name)	
Annexure: B	
Format for Existing Commitments and on-going works	73

Invitations For Bids (IFB)

NATIONAL COMPETITIVE BIDDING

Bid Ref. No: AB-30028/12/2016/AB Section II-DCMSME/TC-BW-Baddi

Date: 01/04/2016

- The Government of India has received a credit from the International Bank for Reconstruction & Development towards the cost of Technology Centre Systems Programme (TCSP) Project and intends to apply a part of the funds to cover eligible payments under the contracts for construction of works as detailed below. Bidding is open to all bidders from eligible source countries as defined in the *IBRD Guidelines for Procurement*. Bidders from India should, however, be registered as Civil Works Contractor with the Government of India or any of the other State Governments/Union Territory, or Central/State Government Undertakings. **Bidders are advised to note the minimum qualification criteria specified in Clause 3 of the Instructions to Bidders to qualify for the award of the contract.** In addition, please refer to paragraphs 1.6 and 1.7 of the World Bank's Guidelines setting forth the World Bank's policy on conflict of interest.
- The Development Commissioner (MSME), Ministry of Micro Small Medium Enterprises, Government of India (Hereinafter called the Employer) now invites sealed bids for the construction of works, detailed in the table below.

Name of work	Bid Security (Rs.)	Period of completion		
Construction of Boundary Wall,	Rs.7,30,000 (Rupees	14 Weeks from the date of		
Guard Room & Gate for	Seven Lakh Thirty	signing of the contract.		
Technology Centre, at Baddi,	Thousand Only)			
Himachal Pradesh	-			

A complete set of bidding documents in English language can be downloaded by the bidders free of cost from the website "www.dcmsme.gov.in/tcsp.html" and "http://www.ctrludhiana.com/". Interested bidders may obtain further information/clarification from the office of Director (Tool Room) / Office of Development Commissioner, Micro, Small & Medium Enterprise (MSME), Government of India, 'A'Wing, 7th Floor, Nirman Bhawan, Maulana Azad Road, New Delhi – 110 108 between 10:00 Hrs to 17:00 Hrs (Indian Standard Time) from 01 April 2016 to 12 April 2016.

The prospective bidders are advised to remain in touch with the website for any updates in respect to this NCB.

Bids must be accompanied by Bid security of the amount specified for the work in the table below and also indicated in Para 5.4 of **Section A** of Instructions to Bidders. Bid security shall be in any one of the forms as specified in the bidding document and shall be valid for 30 days beyond the validity of the bid. Bids should be valid for 60 days after the deadline date specified for submission.

Bids must be delivered to the address mentioned below **on or before 13:00 hours on 02/05/2016 and will be opened at 14:00 hours on the same date**, in the presence of the bidders who wish to attend. If the office happens to be closed on the date of receipt of the bids as specified, the bids will be received and opened on the next working day at the same time and venue. Electronic bids shall not be accepted.

Director (Tool Room), O/o DC MSME Room No 723 (A), A Wing, 7th Floor, Nirman Bhawan, Maulana Azad Road, New Delhi – 110108

Tel: +91 11 23062561; Fax: +91 11 23061068 E mail: tcsp@dcmsme.gov.in

6 Other details can be seen in the bidding document.

tcsp@dcmsme.gov.in

E mail:

(R.K.Rai)
Director (TR)
Office of Development Commissioner (MSME),
Ministry of Micro Small Medium Enterprises,
Room No. 723(A), A Wing, 7th Floor, Nirman Bhawan,
Maulana Azad Road,
New Delhi 110108
Tel. No. +91. 11. 23062561
FAX No. +91. 11. 23061068

Instructions to Bidders (ITB)

SECTION - A

1. Scope of Works:

The **Development Commissioner (MSME), Ministry of Micro Small Medium Enterprises, Government of India** (Employer) invites bids for the construction of works as detailed in the table given below

Brief Description	Approx. value of Works	Period of
of the Works		Completion
Construction of Boundary Wall,	Rs. 3,60,00,000 (Rupees	14 weeks from the
Guard Room & Gate for	Three Crore Sixty Lakh	date of signing of
Technology Centre at Village-	only)	the contract.
Bhatolikalan (Hadbast No. 214),		
Tehsil Baddi, DistSolan,		
Himachal Pradesh		

The successful bidder will be expected to complete the works by the intended completion date specified above.

- **Qualification of the bidder**: The bidder shall provide qualification information which shall include:
 - a) Total monetary value of construction works performed for each year of the last 3 financial years.
 - b) Bidders from India should, however, be registered as Civil Works Contractor with the Government of India or any of the other State Governments/Union Territory, or Central/State Government Undertakings.
 - c) PAN Card Copy of the Bidder.
 - d) Report on his financial turnover for last three financial years i.e. 2012-13, 2013-14 and 2014-15 duly certified by Chartered Accountant.
 - e) Details of any litigation, current or during the last 3 years in which the bidder is involved, the parties concerned and disputed amount or awards in each case.

3. To qualify for award of the contract the bidder:-

- (a) should have satisfactorily completed as a prime contractor at least one similar work of value not less than Rs. 2,90,00,000 (Rupees Two Crore Ninety Lakh Only) in the last three financial years;
- (b) should have achieved in at least one year an annual financial turnover (from civil engineering construction works of similar nature) of value not less than Rs 7,30,00,000 (Rupees Seven Crore Thirty Lakh Only) in the last three years;
- (c) availability of liquid assets and/or credit facilities, net of other contractual commitments and exclusive of any advance payments which may be made under the Contract, of not less than Rs 1,20,00,000 (Rupees One Crore Twenty Lakh Only)
- (d) should not have been debarred (or dealings suspended) by the Central/State Governments/undertakings or by the World Bank as on the date of bid opening.

3.1 Eligibility - Conflict of Interest*

Any Bidder found to have a conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest for the purpose of this bidding process, if the Bidder:

- i. directly or indirectly controls, is controlled by or is under common control with another Bidder; or
- ii. receives or has received any direct or indirect subsidy from another Bidder; or
- iii. has the same legal representative as another Bidder; or
- iv. has a relationship with another Bidder, directly or through common third parties, that puts it in a position to influence the bid of another Bidder, or influence the decisions of the Employer regarding this bidding process; or
- v. any of its affiliates has been hired (or is proposed to be hired) by the Employer or Borrower as Engineer for the Contract implementation;
- vi. has a close business or family relationship with the concerned professional staff of the project implementing agency

(* for further details refer to Procurement Guidelines Clauses 1.6 to 1.8)

4. Bid Price

a) The contract shall be for the whole works as described in Bill Of Quantities (BOQ), drawings and technical specifications. Corrections, if any, shall be made by crossing out, initialing, dating, and rewriting.

- b) All duties, taxes and other levies payable by the contractor under the contract shall be included in the unit price as well as total price quoted by the bidder for each BOQ item.
- c) The rates quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
- d) The Bidder shall fill in rates and prices and line item total for all items of the Works described in the Bill of Quantities along with total bid price (both in figures and words). Items for which no rate or price is entered by the Bidder shall be deemed covered by the other rates and prices in the Bill of Quantities.

5. Submission of Bids

- 5.1 The bidder is advised to visit the site of works at his own expense and obtain all information that may be necessary for preparing the bid.
- Each bidder shall submit only one bid in original and two copies of the same. Electronic Bids shall not be accepted. Bidders should not contact other competing bidders in matters relating to this bid.
- **5.3** The set of bidding documents comprise of the following:
 - i. Architectural Drawings of the works;
 - ii. Structural Drawings;
 - iii. Detailed Bill of Quantities;
 - iv. Technical Specifications;
 - v. Instructions to Bidders (in two sections 'A' & 'B'); and
 - vi. Draft Contract Agreement format and Special Conditions of Contract which will be used for finalizing the Contract.
- **5.4** The bid submitted by the bidder shall comprise the following:-
 - (a) Bid Form in the format given in Section B.
 - (b) Signed and stamped Bill of Quantities;
 - (c) Qualification information given in Section B duly completed.
 - (d) Bid Security, in original form for the amount Rs 7,30,000 (Rupees Seven Lakh Thirty Thousand Only) in one of the following forms:

A bank guarantee issued by a nationalized/scheduled commercial bank located in India in the form given in Section B; and the named beneficiary shall be The Development Commissioner, MSME, Ministry of MSME, Government of India, New Delhi; valid for 30 days beyond the validity of the bid.

OR

- ➤ Bank Demand draft in favor of "PAO, MSME" payable at New Delhi.
- 5.5 The bidder shall seal the original and two copies of the original bid in an envelope addressed to The Director (Tool Room), O/o DC MSME Room No 723 (A), A Wing, 7th Floor, Nirman Bhawan, Maulana Azad Road, New Delhi 110108

The envelope shall also bear the following identification:-

- NCB No: AB-30028/12/2016/AB Section II-DCMSME/TC-BW-Baddi
- Bid for Construction of Boundary Wall, Guard Room & Gate for Technology Centre, Baddi, Himachal Pradesh
- Do not open before 14.00 Hrs. on 02.05.2016
- Name and address of the bidder ______
- Bids must be received in the office of the Director (Tool Room), O/o DC MSME Room No 723 (A), A Wing, 7th Floor, Nirman Bhawan, Maulana Azad Road, New Delhi 110108 (Employer) not later than 13:00 hours on 02/05/2016. If the specified date is declared a holiday, bids shall be received upto the closing time on the next working day.
- **5.7** Any bid received after the deadline i.e. 13:00 hours on 02/05/2016 will be rejected and returned unopened to the bidder.

6. Validity of Bid

Bid shall remain valid for a period not less than 60 days after the deadline date specified for submission. If a Bidder withdraws/modifies/substitutes its bid during the period of bid validity specified by the Bidder on the Letter of Bid, the Bid Security shall be forfeited.

7. Opening of Bids

Bids will be opened in the presence of bidders or their representatives who choose to attend on the date, time and at the place specified in sub-clause 5.6 above. The person(s) attending the bid opening should have valid authorization from the authorized signatory of the bidder. The Bidders shall intimate the name of representative(s) (not more than 2 from one organization) to the e-mail ID (tcsp@dcmsme.gov.in) latest by 10.00 hrs. on 02/05/2016 for facilitating entry passes to Nirman Bhawan.

8. Information relating to evaluation of bids and recommendations for the award of contract shall not be disclosed to bidders or any other persons not officially concerned with the process until the award to the successful bidder is announced.

9. Evaluation of Bids

9.1 Correction of Arithmetical Errors

Bids determined to be substantially responsive shall be checked for any arithmetic errors. Errors shall be corrected as follows:

- (a) where there is a discrepancy between the amounts in figures and in words, the amount in words shall govern;
- (b) where there is a discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, unit rate as quoted shall govern; and
- (c) the amount stated in the Bid shall be adjusted in accordance with the above procedure for the correction of errors

If the Bidder does not accept the corrected amount, the Bid shall be rejected, and the Bid Security may be forfeited.

- **9.2** The Employer will evaluate and compare the bids determined to be substantially responsive i.e. which
 - (a) meet the qualification criteria specified in clause 3 above;
 - (b) are properly signed and stamped; and
 - (c) conform to the terms and conditions, specifications and drawings without material deviations.

10. Award of contract

The Employer will award the contract to the bidder whose bid has been determined to be substantially responsive and who has offered the lowest evaluated bid price and who meets the specified qualification criteria.

- 10.1 Notwithstanding the above, the Employer reserves the right to accept or reject any bids and to cancel the bidding process and reject all bids at any time prior to the award of contract.
- 10.2 The bidder whose bid is accepted will be notified of the award of contract by the Employer prior to expiration of the bid validity period.
- 10.3 The Bid security of unsuccessful bidders will be returned as promptly as possible upon the successful Bidder's signing the contract and furnishing the performance security pursuant to ITB 11.

11. Performance Security

Within 10 days of receiving letter of acceptance, the successful bidder shall deliver to The General Manager, Central Tool Room (CTR), A-5, Focal Point, Ludhiana - 141010 Punjab, India (who shall sign the Contract on behalf of Employer i.e. The

Development Commissioner (MSME), Ministry of Micro Small Medium Enterprises, Government of India) a performance security in the form of a Bank Guarantee for an amount equivalent of 5% of the contract price. The Performance Security shall be valid for 45 days beyond expiry of the defect liability period of the works as specified in clause 12. Failure of the successful Bidder to furnish performance security and signing the Contract agreement within the period stipulated shall constitute sufficient grounds for annulment of award and forfeiture of the Bid Security, in which case the Employer may make the award to the next lowest evaluated bidder or call for new bids.

12. Defects Liability:

The "Defects Liability Period" for the work is one year from the date of taking over possession. During this period, the contractor will be responsible for rectifying any defects in construction free of cost to the Employer.

13. Supply of all construction materials including cement and steel shall be as per the specifications mentioned in this tender document.

14. Corrupt and Fraudulent Practices

The World Bank requires compliance with its policy in regard to corrupt and fraudulent practices as set forth in Section C. In further pursuance of this policy, Bidders shall permit and shall cause its agents (whether declared or not), sub-contractors, sub-consultants, service providers, or suppliers and any personnel thereof, to permit the Bank to inspect all accounts, records and other documents relating to any prequalification process, bid submission, and contract performance (in the case of award), and to have them audited by auditors appointed by the Bank.

15. Temporary Power and Water Supply

All arrangements for power supply and temporary installations of Power Equipment and Water required for construction and drinking purposes shall be the responsibility of the contractor and all costs shall be borne by the Contractor.

16. Safety on Site

Measures to ensure safety of workers and plant at site shall be the responsibility of Contractor and contractor shall provide for adequate Insurance for the workers such as Workmen Compensation, ESI and PF etc as per statutory provisions applicable.

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SECTION - B

- 1. Format for Qualification Information.
- 2. Bid Form.
- 3. Format of Letter of Acceptance.
- 4. Draft Contract Agreement and Special Conditions of Contract
- 5. Bill of Quantities Additional Specifications
- 6. Drawings
- 7. Format of Certification
- 8. Form for Bid Security
- 9. Bank Guarantee For Advance Payment
- 10. Performance Bank Guarantee

Qualification Information

1 For Individual Bidders

1.1 Name of legal entity and Principal place of business:(Attach copy of certificate of incorporation)						_
	Authorization letter in favour of Signatory of Bid (To be enclosed)					
1.2	Total value of Civil Engineering Construction work performed in the last three financial years (in Rs. Lakhs)	2012-13 2013-14 2014-15				

- **1.3** Annual turnover statement for the financial year 2012-13, 2013-14 and 2014-15 duly certified by Chartered Accountant
- **1.4** Work performed as prime contractor (in the same name as of Bidder) on works of a similar nature over the last three financial years as per Annexure 'A'.Copies of the contracts to be enclosed.
- **1.5** Existing commitments and on-going works to be furnished as per Annexure 'B'. Enclose a certificate from Engineer concerned for each of the on-going works.
- **1.6** Proposed subcontracts if any and firms involved.

Sections of the works	Value of Sub- contract	Sub-contractor (name & address)	Experience in similar work of the Sub- Contractor

- **1.7** Evidence of access to financial resources to meet the requirement of working capital: cash in hand, lines of credit, etc. List them and attach copies of supporting documents.
- **1.8** Name, address, and telephone, telex, and fax numbers of the Bidders' bankers who may provide references if contacted by the Employer.

1.9 Information on litigation history in which the Bidder is involved.

Other party(ies)	Employer	Cause of dispute	Amount involved	Remarks showing present status

Bid Form

To Director (Tool Room), O/o DC MSME Room No 723 (A), A Wing, 7th Floor, Nirman Bhawan, Maulana Azad Road, New Delhi – 110108
Subject : Construction of Boundary Wall , Guard Room & Gate for Technology Centre Baddi , Himachal Pradesh .
Reference: NCB Ref. No AB-30028/12/2016/AB Section II-DCMSME/TC-BW-Baddi
Sir, We have no reservations to the Bidding Documents, and offer to execute the Works described in your NCB document referred to above in accordance with the Conditions of Contract enclosed therewith at a total Fixed Contract Price of Rs.* [in figures]; Rs [in words].
This bid and your written acceptance of it shall constitute a binding contract between us. We understand that you are not bound to accept the lowest or any bid you receive.
We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery or collusive arrangements with competitors.
We also undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India on date namely "Prevention of Corruption Act 1988."
We hereby confirm that this bid is valid for 60 days as required in Clause 6 of the Instructions to Bidders.
We meet the eligibility requirements and have no conflict of interest in accordance with ITB 3.1
We have not been debarred/removed from approved list (dealings suspended) by the Central or any State Government or by the World Bank.
Yours faithfully,
Authorized Signature : Date: Name & Title of Signatory :

* To be filled in by the Bidder, together with his particulars and date of submission at the bottom of this Form.

Name of Bidder Address of Bidder

Letter Of Acceptance CUM NOTICE TO PROCEED WITH THE WORK

(LETTERHEAD OF THE EMPLOYER)

	Dated:
То:	[Name and address of the Contractor]
	· ·
Dear Sirs,	
	ed for execution of the for the contract price
of Rupees	[amount in words and figures], is
hereby accepted by us.	
· 1	performance security for an amount of Rs. the contract price) within 10 days of the receipt of
the letter. The Performance Security in the fo Room, A-5, Focal Point, Ludhiana -141010 behalf of Employer i.e. The Development Co	rm of Bank Guarantee in favour of Central Tool Punjab, India (who shall sign the Contract on ommissioner (MSME), Ministry of Micro Small
	shall be valid till the expiry of the defect liability Failure to furnish the Performance Security will forfeiture of Bid Security.
You are also requested to sign the Contrallater than under and ensure	
With the issuance of this acceptance lett contract for the above said work stands conclude	ter and your furnishing the Performance Security, ded.
	Yours faithfully,
	Authorized Signature Name and title of Signatory

Draft Contract Agreement form

ARTICLES OF AGREEMENT

1.	This deed of contract agreement is made month	e in th 20	ne form of agreement on day, between The General Manager
	Central Tool Room (CTR), A-5, Focal I		
	shall sign the Contract on behalf of Em (MSME), Ministry of Micro Small Me hereinafter referred to as the first party)	ediun and	n Enterprises, Government of India) (Name of the
	Contractor), Address(execute the work of Construction of Technology Centre, Baddi, Himachal the following terms and conditions.	Boun	dary Wall, Guard Room & Gate for
2.	Cost of the Contract The total cost of the works (hereinafter referre in Annexure –IA.	ed to a	s the "total cost") is Rs as reflected
3.	Payments under its contract:		
	Payments to the second party for the construction the following manner:- Stagewise Payment Terms.	etion v	work will be released by the first party in
	 Advance Payment (On signing of agreement) 	:	10% of the contract price on receipt of Bank guarantee for the equivalent amount in the format attached*
	2.On Completion of Six weeks from the date of signing of the contract	:	Based on the bills certified by Construction Management Consultant (TCE) for the works completed during the period.
	3. On Completion of Ten weeks from the date of signing of the contract	:	Based on the bills certified by Construction Management Consultant(TCE) for the works completed during the period
	4. On Completion of the entire scope of work	:	Based on the bills certified by the Construction Management Consultant (TCE) and on completion of the entire work and issue of completion certificate.

^{*} Advance Payment Bank Guarantee shall be valid till 30 days beyond the date of completion of the contract at the time of submission and shall be refunded immediately after advance payment has been repaid fully.

- **3.1** The advance shall be repaid with 10 percentage deductions from the each bill until the advance has been fully repaid.
- **3.2** The Employer shall retain (Retention Money) @ 6% of the amount from each payment due to the Contractor subject to the maximum of 5% of contract price. The full amount retained shall be repaid upon completion of the works and after issue of completion certificate.
- **3.3** Payments at each stage will be made by the first party:
 - (a) On the second party submitting an invoice for an equivalent amount, and
 - (b) On certification of the invoice (except for the first advance payment) by the Engineer nominated by the first party with respect to quality and quantity of works completed as per the format in Annexure -2.

4. Notice by Contractor to Engineer

The second party, on the works reaching each stage of construction, issue a notice to the Construction Management Consultant (CMC) i.e. M/s Tata Consulting Engineers (TCE), who is the Engineer nominated by the first party (who is responsible for supervising the contractor, administering the contract, certifying payments due to the contractor, issuing and valuing variations to the contract etc.) to visit the site for certification of works. Within 7 days of the receipt of such notice, the Engineer nominated, will ensure certification of bills after due verification.

5. Completion time

The works should be completed within 14 weeks from the date of signing of this Contract. In exceptional circumstances, the time period stated in this clause may be extended in writing by mutual consent of both the parties.

6. Compensation events

If any of the compensation events mentioned below would prevent the work being completed by the intended completion date, the first party will decide on the intended completion date being extended by a suitable period:

- a) The first party does not give access to the site or a part thereof by the agreed period.
- b) The Engineer orders a delay in writing or does not issue Good for Construction (GFC) drawings, specifications or instructions for execution of the work on time despite it being reported in writing to the first party with copy to the Engineer.
- c) Ground conditions are substantially more adverse than could reasonably have been assumed before issue of letter of acceptance and from information provided to second party or from visual inspection of the site.
- d) Payments due to the second party are delayed without reason.

- e) Certification for stage completion of the work is delayed unreasonably.
- Any delay on the part of the second party in completing the construction within the stipulated period will render him liable to pay liquidated damages @ 0.05% of the contract value per day which will be deducted from payments due to him. The first party may cancel the contract and take recourse to such other action as deemed appropriate once the total amount of liquidated damages exceeds 5 % of the contract amount.

8. Duties and responsibilities of the first party

- **8.1** CMC, the Engineer nominated by the first party shall visit and inspect the works done by the second party in order to validate the works with respect to the drawings, specifications, quantity and quality. The Engineer will issue written guidelines to the second party as necessary.
- **8.2** CMC shall supply 3 sets of GFC drawings, specifications and guidelines if necessary to the second party for the proposed works.
- **8.3** Possession of the site will be handed over to the second party within 7 days of signing of the Contract.
- 8.4 The Engineer or such other person as may be authorized by the first party shall hold meeting once in a week where the second party or his representative at site will submit the latest information including progress report and difficulties if any, in the execution of the work. The whole team may jointly inspect the site on a particular day to take stock of activities.
- 8.5 The Engineer shall record his observations/instructions at the time of his site visit in a site register maintained by the second party. This register and other relevant documents shall be handed over to first party after completion of work. The second party will carry out the instructions and promptly rectify any deviations/defects pointed out by the Engineer. If the deviations/defects are not rectified, within the time specified in the Engineer's notice, the first party on recommendation of the Engineer nominated by it, may instruct stoppage or suspension of the construction. It shall thereupon be open to the first party on the recommendation of the Engineer to have the deviations/defects rectified at the cost of the second party.

9. Duties and responsibilities of the second party

9.1 The second party shall:

- a) take up the works and arrange for its completion within the time period stipulated in clause 5;
- b) employ suitable skilled persons to carry out the works;
- c) regularly supervise and monitor the progress of work;

- d) abide by the technical suggestions / direction of supervisory personnel including Engineers regarding construction;
- e) be responsible for bringing any discrepancy to the notice of the Engineer (representative of the first party) and seek necessary clarification:
- f) ensure that the work is carried out in accordance with specifications, drawings and instructions of the Engineer.
- g) keep the Engineer/first party informed about the progress of work;
- h) correct the notified defects within the time period specified by the Engineer.
- i) be responsible for all security and watch and ward arrangements at site till handing over of the works to the first party;
- j) maintain necessary insurance against loss of materials/cash, etc. or workmen disability compensation claims of the personnel deployed on the works as well as third party claims from the start date to the end of defect liability period;
- k) pay all duties, taxes and other levies payable by construction agencies as per law under the contract (First party will effect deduction from running bills in respect of such taxes as may be imposed under the law);
- 1) abide by all labour enactments and rules made there under, regulations, notifications and by laws of the State or Central Government or local authority;
- m) abide by all enactments on environmental protection and rules made thereunder, regulations, notifications and by-laws of the Sate or Central Government, or local authorities;
- n) be responsible for the safety of all activities on the Site.
- o) All arrangements for power supply and temporary installations of Power Equipment and Water required for construction and drinking purposes shall be the responsibility of the contractor and all costs shall be borne by the Contractor.

10. Variations / Extra Items

The works shall be executed by the second party in accordance with the GFC drawings and specifications. No variation in item rate is acceptable.

- 10.1 However, if the Engineer issues instructions for execution of extra items, the following procedure shall be followed:
 - a) The second party shall provide the Engineer with a bid (including detailed rate analysis) within three days of instructions for carrying out the extra items when requested to do so by the Engineer.

- **b**) The Engineer shall assess and review the bid, and make recommendation to the first party for issue of change order for extra item(s). First party shall issue change order to the second party.
- **c**) If the bid given by the second party is unreasonable, the first party may issue change order for extra items based on the recommendation of the Engineer which shall be binding on the second party.
- d) The Bill of Quantities shall contain priced items for the Works to be performed by the Contractor. The Bill of Quantities is used to calculate the Contract Price. The Contractor will be paid for the quantity of the work accomplished at the rate in the Bill of Quantities for each item. If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item, the Engineer may allow for the change.
- e) All above changes due to quantity variation and extra items as approved by the First Party, from time to time, accumulating to above 10% of Contract Price shall be in the form of amendment to the Contract duly signed by the First Party and the Second Party.

11. Securities

The Performance Security in the form of Bank Guarantee shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and by a Nationalized Bank or a scheduled commercial Bank in India. The Performance Security shall be valid until a date 45 days after the date of completion of one year of defect liability period.

12. Termination

- 12.1 The Employer may terminate the Contract if the second party causes a fundamental breach of the Contract.
- 12.2 Fundamental breaches of Contract include, but shall not be limited to the following:
 - (a) the contractor stops work for 7 days and the stoppage has not been authorized by the Engineer;
 - (b) the Contractor has become bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
 - (c) the Engineer gives Notice that failure to correct a particular deviation/defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Engineer;
 - (d) the Contractor does not maintain a security which is required;
 - (e) the Contractor has engaged in corrupt, fraudulent, collusive, coercive or obstructive practices, in competing for or in executing the Contract; and

- (f) the contractor has delayed the completion of the Works by the number of days for which the maximum amount of liquidated damages can be paid.
- 12.3 Notwithstanding the above, the Employer may terminate the Contract for convenience.
- 12.4 If the Contract is terminated, the Contractor shall stop work immediately, make the Site safe and secure and leave the Site as soon as reasonably possible.

13. Payment upon Termination

- 13.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Engineer shall issue a certificate for the value of the work done less advance payments received up to the date of the issue of the certificate, less other recoveries due in terms of the contract, less taxes due to be deducted at source as per applicable law.
- 13.2 If the Contract is terminated at the Employer's convenience, the Engineer shall issue a certificate for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract and less taxes due to be deducted at source as per applicable law.

14. Dispute settlement

If over the works, any dispute arises between the two parties, relating to any aspects of this Agreement, the parties shall first attempt to settle the dispute through mutual and amicable consultation.

In the event of agreement not being reached, the matter will be referred for arbitration by a Sole Arbitrator not below the level of retired Chief Engineer / Superintending Engineer, (not connected in part or whole with this Project in his service) to be appointed by the first party. The Arbitration will be conducted in accordance with the Arbitration and Conciliation Act, 1996. The decision of the Arbitrator shall be final and binding on both the parties.

15. Corrupt and Fraudulent Practices

The World Bank requires compliance with its policy in regard to corrupt and fraudulent practices as set forth in Section C. In further pursuance of this policy, Bidders shall permit and shall cause its agents (whether declared or not), sub-contractors, sub-consultants, service providers, or suppliers and any personnel thereof, to permit the Bank to inspect all accounts, records and other documents relating to any prequalification process, bid submission, and contract performance (in the case of award), and to have them audited by auditors appointed by the Bank.

Special Conditions of the Contract

Special Conditions of Contract shall be read in conjunction with the draft contract agreement, Bill of Quantities, specifications of work, drawings and any other documents forming part of this contract wherever the context so requires.

- 16.0 Contractor shall establish and mark the boundary at site before the start of construction work within 7 days after the date of Award of Work and get it certified from the concerned local authority in the presence of owner representative.
- 16.1 In case, there is any difference or discrepancy between the description of items as given in the Bill of Quantities, Specifications governing the contract and additional specifications for individual items of work and I.S. Codes etc., the following order of precedence shall be observed.
 - I. Description of items as given in Bill of Quantities.
 - II. CPWD Specifications, CPHEEO and any standard(s) mentioned in technical specifications including correction slips issued up to the last date of uploading/submission of tender.
 - III. Additional Specifications.
 - IV. Tender drawings attached.
 - V. Indian Standards Specifications of B.I.S.
 - VI. ASTM, BS, or other foreign origin codes mentioned in tender document.
 - VII. Manufacturer's specifications and as decided by the Engineer.
 - VIII. Sound Engineering practices or well established local construction practices.
- 16.2 Excavated good earth declared surplus or otherwise shall be disposed of at designated locations within the site.
- Disposal of surplus excavated earth, if any, including mud, liquid mud, dismantled Reinforced Cement Concrete (RCC)/RMC, dismantled brick work, Dismantled tiles, etc. shall be made only in the dumping yard approved by local authority. It will be the responsibility of the Contractor to get the permission for dumping yard from local authority as required. If any royalty/ fee is payable to local authority, such royalty/ fee shall also be borne by the Contractor. Disposal shall be carried out strictly as per the regulations of local authority. However, the above materials shall not be removed out of Owner's premises without prior written authorisation of the Engineer.
- 16.4 The Contractor shall carefully protect and preserve all bench marks, site details, pegs and other things used in the setting out of the building for Construction. All preliminary works such as establishment of a set of bench marks, permanent DGPS, Total Station/ theodolite stations, centre line pillars, etc. including required materials, tools, plants, equipment, labour, etc. for performing such functions necessary and ancillary there to for the commencement and during the progress of the work and till physical completion of the work shall be carried out by the Contractor at his own cost. It shall be Contractor's responsibility

to shift the existing benchmark to his work site to set out the necessary control points and alignment of the various works. The Contractor shall also provide DGPS instrument with other required precision Survey Instruments as per site requirement and/ or as directed by the Engineer. The work of setting out shall be deemed to be a part of general works preparatory to the execution of the work and no separate payment shall be made for the same.

- All temporary works, ancillary works, enabling works, including dewatering of surface and subsoil water, preparation and maintenance of temporary drains at the work site, preparation and maintenance of approaches to working areas, wherever required, for execution of the work shall be the responsibility of the Contractor and all costs towards the same shall be deemed to have been included in the quoted prices.
- 16.6 All electrification works shall be performed after possessing valid electrical license (in the event of the works being sub contracted, the sub-contractor should have the necessary license).
- 16.7 All water supply/sanitary works shall be performed after possessing valid license for executing such works (in the event of the works being sub-contracted, the sub-contractor should have the necessary license).
- 16.8 Contractor shall take all necessary precautions to protect and safeguard the foundation of the adjacent building/ Structure/ overhead/ underground utilities. In case any damage occurs to the adjacent building/ Structure/ overhead/ underground utilities, the contractor shall be liable for such damages and shall make good for all such damages at his own cost. Nothing extra shall be payable on this account.
- 16.9 First Party shall not permit the Contractor to set up labour camp within their boundary. Contractor shall make his own arrangements to set up labour camps.

16.10 METHOD STATEMENT

The Contractor shall submit a 'Method Statement' for the approval of the Engineer soon after the award of work to him. The 'Method Statement' is a statement by which the construction procedures for important activities of construction are stated, checked and approved. The 'Method Statement' should have a description of the item with elaborate procedures in steps to implement the same, the specifications of the materials involved, their testing and acceptance criteria, equipment to be used, precautions to be taken, mode of measurement, etc.

16.11 WORK PROGRAMME

The Contractor shall, within 3days after the date of award of the work, submit his detailed work programme, detailed Project Quality Plan for works executable at site for the approval of the Engineer, which shall clearly set out his proposed schedule for the whole of the Works, the time for completing the major sections of the Works and his schedule for mobilising the materials and equipment necessary for implementing the Works in a timely, cohesive and efficient manner. The Contractor shall submit the above Resource Mobilisation Plan.

16.12 TOOLS, PLANT AND MACHINERY

The deployment of Tools, Plant and Machinery (TP&M) shall be planned as per work requirement to suit the nature, quantum and speed of the work for lifting/ hoisting construction materials/ equipment, etc. The TP&M shall be maintained in good working condition throughout the progress of work. All adequate precautions regarding formal upkeep of valid Statutory/ Safety credentials of major construction equipment as directed by the Engineer, their installation, operation, maintenance, materials, etc., shall be taken care of. The operating staff to be deployed shall be properly qualified and adequately trained and experienced. All safety precautions shall be taken during the project duration, against possible accident. The Contractor shall deploy his representative to effectively enforce the safety rules and regulations in this regard. Nothing extra shall be payable on this account for the above.

16.13 COMPLETION DRAWINGS AND STANDARD MEASUREMENT BOOK

During the execution of the Works a set of drawings shall be retained in the Contractor's Site Office for the exclusive purpose of recording changes made to the Work as the construction proceeds. On completion of the Work, the Contractor shall submit required details and "Mark-up" of changes, if any, in all drawings of the project to the Engineer. The Contractor shall render all required assistance in getting the "As Built" drawings prepared by the Engineer. These drawings shall include and show all the changes/ deviations made from the working drawings during the course of construction and also the other details as called for by the Engineer.

Along with the completion drawings, the Contractor shall also prepare and submit to the Engineer the Standard Measurement Book (SMB) in the form of a bound book in two sets and a soft copy of the same in Excel. SMB shall incorporate the standard measurements of the items as per the completion/ "As Built" drawings in modules finalised with the Engineer. All the above to be done at no extra cost.

16.14 Environmental Aspect:

Project is proposed under Griha certification. Required compliances/ practices will have to be followed during construction as directed by Engineer.

Bill of Quantities (BOQ)

The approximate Bill of Quantities is indicated below to give an idea of the work, which should be executed in accordance with the drawings and specifications, to enable the bidder to furnish the line item rates. The Bill of Quantities contains priced items for the Works to be performed by the Contractor. The Bill of Quantities is used to calculate the Contract Price. The Contractor will be paid for the quantity of the work accomplished at the rate in the Bill of Quantities for each item. If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item the Engineer shall allow for the change.

The work shall generally be carried out in accordance with the latest CPWD specifications with up to date correction slips, Additional Specifications(as provided hereinafter BOQ), GFC drawings and as per instructions of Engineer. GFC drawings will be released progressively to the contractor commensurate to the construction schedule.

SCHEDULE OF QUANTITIES (SOQ) FOR GUARD ROOM, BOUNDARY WALL & GATE FOR BADDI								
S No	Description	Quantity	Unit	Unit Rate in Rs. Amount				
2110	_ 0001- F 100.11	· · · · · · · · · · · · · · · · · · ·	<i>-</i>	In Figures	In Words			
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (3)x(6)		
1	EARTH WORK							

S No	Description	Quantity	Unit	U	Amount	
Sito				In Figures	In Words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (3)x(6)
1.1	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30cm in depth. 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.					
1.1.1	All kinds of soil	2837	cum			
1.2	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50 m and lift upto 1.5 m, disposed earth to be levelled and neatly dressed.					
1.2.1	Ordinary rock	1373	cum			

S No	Description	Quantity	Quantity Unit	U	Amount	
2110	2 0001 P 1001	Q aaaaaa		In Figures	In Words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (3)x(6)
1.2.2	Hard rock (blasting prohibited)	1373	cum			
1.3	Extra for excavating trenches for pipes, cables etc. in all kinds of soil for depth exceeding 1.5 m, but not exceeding 3 m. (Rate is over corresponding basic item for depth upto 1.5 metre).	579	cum			
1.4	Extra for excavating trenches for pipes, cables, etc. in ordinary/hard rock exceeding 1.5 m in depth but not exceeding 3 m. (Rate is over corresponding basic item for depth upto 1.5 metre).	559	cum			
1.5	Extra for every additional lift of 1.5 m or part thereof in excavation / banking excavated or stacked materials.					
1.5.1	All kinds of soil	579	cum			
1.5.2	Ordinary or hard rock	559	cum			

S No	Description	Quantity	Unit	Un	Unit Rate in Rs.		Amount
5110	Description	Quantity		In Figures	In Words		
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (3)x(6)	
1.6	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	4540	cum				
1.7	Supplying and filling in plinth with Jamuna/Local available sand under floors including, watering, ramming consolidating and dressing complete.	74	cum				
1.8	Providing and laying minimum 230 mm thick dry rubble (soling) packing for foundation with approved hard stone set in regular lines, hand packed, filling the interstices with small stone chips and sand, ramming, watering and compacting, etc. complete.	2040	sqm				
	Total carried over to summary						

S No	Description	Quantity	antity Unit	Unit Rate in Rs.		Amount
				In Figures	In Words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (3)x(6)
2	PLAIN CEMENT CONCRETE					
2.1	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering - All work upto plinth level:					
2.1.1	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	197	cum			
2.2	Providing and laying damp-proof course 50mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size).	10	sqm			
	Total carried over to summary					

S No	Description	Quantity	Unit	U	Unit Rate in Rs.		Amount
2110	2 0001 F 1001	Q aaaaaa	<i>-</i>	In Figures	In Words		
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (3)x(6)	
3	REINFORCED CEMENT CONCRETE						
3.1	Centring and shuttering including strutting, propping etc. and removal of form for :						
3.1.1	Foundations, footings, bases of columns, etc. for mass concrete.	3859	sqm				
3.1.2	Suspended floors, roofs, landings, balconies and access platform.	92	sqm				
3.1.3	Lintels, beams, plinth beams, girders, bressumers and cantilevers.	3167	sqm				
3.1.4	Columns, Pillars, Piers, Abutments, Posts and Struts.	2817	sqm				
3.2	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete. Upto plinth level.						

S No	Description	Quantity	Unit	Unit Rate in Rs.	Amount	
5110	Description	Quantity		In Figures	In Words	1 mount
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (3)x(6)
3.2.1	Thermo-Mechanically Treated bars.	84440	kg			
3.3	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.					
3.3.1	Thermo-Mechanically Treated bars.	5174	kg			
3.4	Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work, using cement content as per approved design mix, manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work including pumping of R.M.C. from transit mixer to site of laying, excluding the cost of centering, shuttering finishing and					

S No	Description	Quantity	Unit _	Unit Rate in Rs.		Amount
2 - 1 -		C analay		In Figures	In Words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (3)x(6)
	reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. (Note:- Cement content considered in this item is @ 330 kg/cum. Excess/less cement used as per design mix is payable/recoverable separately).					
3.4.1	All works upto plinth level.	1621	cum			
3.4.2	All works above plinth level upto floor V level.	48	cum			
	Total carried over to summary					
4	BRICK WORK					

S No	Description	Quantity	Unit	Unit Rate in Rs.	nit Rate in Rs.	Amount
2110	2 escription	Quantity		In Figures	In Words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (3)x(6)
4.1	Brick work with clay flyash F.P.S. (non modular) brick of class designation 7.5 in superstructure above plinth level up to floor five level in:					
4.1.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	912	cum			
4.2	Half brick masonry with non modular fly ash bricks of class designation 10, conforming to IS: 12894, in super structure above plinth and upto floor V level					
4.2.1	cement mortar 1:4 (1 cement : 4 coarse sand)	26	sqm			
	Total carried over to summary					
5	MARBLE WORK/FLOORING WORK					

S No	Description	Quantity Unit	Quantity	Unit	Unit Rate in Rs.	Amount
				In Figures	In Words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (3)x(6)
5.1	Providing and fixing 18mm thick gang saw cut mirror polished (premoulded and prepolished) machine cut for kitchen platforms, vanity counters ,window sills , facias and similar locations of required size of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement : 4 coarse sand) with joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing moulding and polishing to edge to give high gloss finish etc. complete at all levels.					
5.1.1	Granite of any colour and shade					
5.1.1.1	Area of slab over 0.50 sqm.	116	sqm			
5.2	Mirror polishing on marble work/Granite work/stone work where ever required to give high gloss finish complete.	116	sqm			

S No	Description	Quantity	Unit	Unit Rate in Rs.	nit Rate in Rs.	Amount
5110	2 escription	Quantity		In Figures	In Words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (3)x(6)
5.3	Providing and fixing Ist quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	60	sqm			
5.4	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) :					

S No	Description	Quantity	Unit	Unit	Unit Rate in Rs.		Amount
2110	_ 0.001.p. 100.00	Quantity		In Figures	In Words		
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (3)x(6)	
5.4.1	25 mm thick	72	sqm				
5.5	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement: 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete	8	sqm				
	Total carried over to summary						
6	FINISHING WORK						
6.1	12 mm cement plaster of mix :						
6.1.1	1:4 (1 cement : 4 fine sand)	468	sqm				
6.2	20 mm cement plaster of mix :						

S No	Description	Quantity	antity Unit	U	Amount	
		Q and a second	-	In Figures	In Words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (3)x(6)
6.2.1	1:4 (1 cement: 4 fine sand)	7934	sqm			
6.2	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade					
6.2.1	New work (two or more coats) over and including priming coat with cement primer.	468	sqm			
6.3	Finishing walls with Acrylic Smooth exterior paint of required shade:					
6.3.1	New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including base coat of water proofing cement paint applied @ 2.20 kg/ 10 sqm).	360	sqm			
6.4	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	468	sqm			

S No	No Description Quantity	Quantity	Unit	U	Amount	
			In Figures	In Words		
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (3)x(6)
6.5	Finishing walls with water proofing cement paint of required shade:					
6.5.1	New work (Two or more coats applied @ 3.84 kg/10 sqm)	8607	sqm			
	Total carried over to summary					
7	Doors & Windows					
7.1	Providing and fixing fixed aluminium frame Window with tampered Glass 8mm thk including required hardware etc.	22	sqm			
7.2	Providing and fixing openable aluminium frame Window with 5 mm thick glass with required hardware etc.	22	sqm			

S No	Description	Quantity	Quantity	Unit	U	nit Rate in Rs.	Amount
	Z esectipasis	Quantity		In Figures	In Words		
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (3)x(6)	
7.3	Providing and fixing Flush Door shutters of size 35mm thick including 16 guage 50x125 mm hollow metal frame painted on both sides including hardwares etc.	10	each				
	Total carried over to summary						
8	WATER PROOFING						
8.1	Providing and laying water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations:						
	a) Cleaning of surface and Applying a slurry coat of neat cement using 2.75 kg/sqm. of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer -in-charge over the						

S No	No Description Quant	Quantity	Unit	U	nit Rate in Rs.	Amount
5110		Quantity		In Figures	In Words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (3)x(6)
	RCC slab including adjoining walls upto 300mm height including cleaning the surface before treatment.					

S No	Description Quantity	Quantity	Unit	U	Amount	
	•			In Figures	In Words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (3)x(6)
	b)Plastering of uneven surface where ever required with 12mm cement mortar 1:4 (1 Cement: 4 Coarse sand) to make the surface even as per manufacturer's specifications and as directed by Engineer -in-charge. Cost to include chipping of undulations to make it even surface. c) Applying Three coats of Tapecrete -(first layer of tapecrete to be @0.253 kg/sqm, the second and third layer to be @0.126 kg/sqm) each admixed with grey cement and sealing all corners, joints, junctions of pipes and masonry etc. with water proofing putty/chemical compound all complete as per manufacturer's sp[ecifications and drawing. 12mm thick protective plaster 1:4 (1 Cement: 4 Coarse sand) over treated surface etc. complete. (quoted rate to include grouting of RCC surface for any crack/fissures)					

S No	Description Qu	Quantity	Unit	U	Amount	
5110		Quantity		In Figures	In Words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (3)x(6)
8.1.1	With average thickness of 120mm and minimum thickness at khurra as 65 mm.	154	sqm			
	Work to be excecuted as per the specifications/design drawings/to the satisfaction of Engineer-in-Charrge					
8.2	Grading roof for water proofing treatment with					
8.2.1	Cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	8	cum			
	Total carried over to summary					
9	CONDUITING					

S No	Description	Quantity	Unit	U	Amount	
5110	2 escription	Quantity		In Figures	In Words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (3)x(6)
9.1	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.					
9.1.1	25 mm	160	RM			
9.2	uPVC pipes (working pressure 4 kg / cm 2) Single socketed pipe 75 mm dia	393	RM			
	Total carried over to summary					
10	STEEL WORK					
10.1	GATE					

S No	Description	Quantity	Unit	U	Amount	
5110		Quantity		In Figures	In Words	
(1)	(2)	(3)	(4)	(5)	(6)	(7) = (3)x(6)
10.1.1	Steel work welded in built up sections/ framed work including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.					
	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works.	3008	kg			
10.2	Providing and fixing concertina coil fencing with angle iron 'Y' shaped of required no. all including painting complete as per drawings, specifications and as directed.	936	RM			
	Total carried over to summary					
	Total Bid Price in Rs.(in figures)					
	10th Did 11te ii Rs.(iii ligures)					

SCHEDULE OF QUANTITIES (SOQ) FOR GUARD ROOM, BOUNDARY WALL & GATE FOR BADDI Unit Rate in Rs. S No **Description** Quantity Unit Amount **In Figures** In Words (7) = (3)x(6)(2) (4) (5) (1) (3) (6) **Total Bid Price in Rs.(in words)**

We agree to execute the works in accordance with the GFC drawings and technical specifications at a total fixed contract price of Rs......(amount in figures)
(Rs...... amount in words).

Signature of Contractor

Note: Where there is a discrepancy between the rate in figures and words, the rates in words will govern.

Additional Specifications:

1. ALUMINIUM WINDOWS & VENTILATORS

MATERIALS

- Aluminum alloy used in the manufacture of extruded sections for the fabrication of doors, windows, ventilators shall conform to designation 63400 WP of IS:733.
- Transparent sheet glass shall conform to the requirements of IS: 2835. Wired and figured glass shall be as per IS: 5437.
- ➤ Builder's hardware of fittings & fixtures shall be of the best quality from approved manufacturers.

WORKMANSHIP

- All aluminum doors, windows, and ventilators shall be of the type as specified in the respective items of work and of sizes as indicated in the drawings. The doors, windows, ventilators shall conform to the requirements of IS: 1948. Aluminum windows, shall conform to IS: 1949, if so specified.
- All aluminum units shall be supplied with anodized/powder coated finish. The minimum anodic film thickness shall be 0.015 mm.
- ➤ Doors, windows and ventilators shall be of an approved manufacture. Fabrication of the units shall be with the extruded sections, cut to correct lengths, mitered and welded at the corners to a true right angle conforming to the requirements of IS: 1948. Tolerance in overall dimensions shall be within + 1.5mm. The frames and shutters shall be free from warp or buckle and shall be square and truly plane. Punching of holes, slots and other provisions to install fittings or fixtures later shall be made at the correct locations, as per the requirements.
- Aluminum swing type doors, aluminum sliding windows, partitions shall be as described in the item of work and/or bid drawings which indicate generally the arrangement along with the overall size of the various components and weight per running meter of the extruded sections to be adopted.
- ➤ IS:1948 and IS:1949 referred to incorporates the sizes, shapes, thicknesses and weight per running meter of extruded sections for the various components of the units. However, new sizes, shapes, thicknesses with modifications to suit snap-fit glazing clips etc. are continuously being added by various leading manufacturers of extruded sections, which are available in the market. As such, the sections of the various components of the unit proposed by the Contractor, will be reviewed by the Engineer

and will be accepted only if they are equal to or marginally more than that specified in the codes/ item of works.

- The framework of the partitions with mullions and transoms shall be with anodized/powder coated aluminum box sections of dimensions as per the item of work. Anodized/powder coated Aluminum box sections shall be in-filled with timber of class 3 (silver oak or any other equivalent) as per IS:4021. Panels of double/single glazing/plywood shall be fixed as per details indicated in the drawing. Partitions shall be fixed rigidly between the floor and the structural columns/beams including provision of necessary shims for wedging etc. Finished work shall be of rigid construction, erected truly plumb to the lines and levels, at locations as per the construction drawings.
- > Specific provisions as stipulated for steel doors, windows, ventilators shall also be applicable for this item work. Glazing beads shall be of the snap-fit type suitable for the thickness of glazing proposed as indicated in the item of work.
- A layer of clear transparent lacquer shall be applied on aluminum sections to protect them from damage during installation. This lacquer coating shall be removed after the installation is completed

2. RUBBLE SOLING WORK

SCOPE:

This specification covers general requirements for materials to be used for carrying out rubble soling including requirements in regard to the quality & placement of rubble soling. This also covers the compaction of surfaces for level & profile thereof.

GENERAL:

Area receiving soling will be excavated and trimmed to the required levels, profile, gradient, if any, and the same shall be rolled / compacted thoroughly, as approved by the Engineer.

MATERIAL SPECIFICATION:

Stone for soling work shall be black stone of good quality of specified size with minimum size variation. It shall be free from impurities and foreign matter.

WORKMANSHIP & CONSTRUCTION:

- Soling shall not be constructed on a wet surface. Unless otherwise specified, the width of the soling stone shall be 230 mm and the finished soling course thickness shall be 230 mm.
- As the laying of rubble advances the soling shall be hand packed by wedging and packing with 80 mm metal in the joints of the soling and driving them by hammers in place so as to fill the voids as completely as possible. This operation of hand packing

shall closely follow the rubble laying. The soling shall be laid and hand packed true to grade and section and these shall be often checked by boning rods, template boards, fish line, etc. The grades, sections, etc. of soling shall correspond to those of the surfacing coming thereon. The soling thus laid shall be finished by knocking out projecting stones and filling depressions by chips to reach up to the grade and camber.

The quality of the 80 mm metal shall be same as that specified for the soling stone and the longest dimension shall not be more than 100 mm and the shortest dimension not less than 50 mm.

Measurement:

Measurements shall be made for the finished work in square metres of the actual plan area covered with the soling stone. The rate shall include the cost of all materials, labour, plant and equipment required in all the operations and including soling stone and gravel.

3. DOOR, WINDOWS, VENTILATORS and WIRE FENCING

SCOPE

The specifications refer carpentry and joinery work in the building.

GENERAL

The provision of the latest revisions of the following I.S.codes shall form a part of these specifications.

IS205	Specifications for non-ferrous metal butt hinges.
IS287	Recommendation for maximum permissible moisture content of Timber
	used for different purposes
IS303	Specification for plywood for general purpose.
IS362	Specification for parliamentary hinges.
IS419	Specification for putty for the use on window frames.
IS883	Code of practice for design for structural timber in building.
IS1003	Specification for Timber paneled and glazed shutters part – II Window and
	ventilator shutters
IS1200	Method of measurement of building and Civil Part XXI Engineer Works –
	Wood Work and joinery
IS1341	Specification for steel butt hinges
IS1658	Specification for Fibre Hard Boards
IS1761	Specification for transparent sheet glass for glazing and framing purposes.
IS3087	Specification for wood particle boards (medium density for structural timber
	in building

Other I.S. codes not specifically mentioned here, but pertaining to steel work, woodwork and joinery form part of these specifications.

MATERIALS

SAWN TIMBER

First class Indian teak wood of class as specified in the time shall be used. The timber shall be of high quality and well seasoned. It shall have uniform colour free from defects such as cracks, dead knots, shakes, sapwood etc. no individual hard and would knot shall be more than 6 sq.cm. in size and the aggregate area of such knots shall not be more than 1% of the area of the piece. The timber shall be close gained having not less than 2 wroth rings per cm. Width in cross section. The maximum permissible percentage of moisture content for well seasoned timber used in building work shall be as specified in the IS: 287.

GLAZING MATERIALS

Glass panels

- ➤ Unless otherwise specified, glass pane used in glazed or paneled and glazed shutters, shall be of good quality glass of thickness not less than 2 mm for pane up to 0.1 sq.m. in area not less than 3 mm for glass pane of area larger than 0.1 sq.m. with a tolerance of 0.2 mm in both cases. The glass shall be free from flaws such as speaks, bubbles, smoke waves, air holes, etc. and shall conform to the relevant IS: 1761.
- Unless otherwise specified, glass panes used in shutters of bath room and lavatories shall be frosted and of thickness as mentioned above and shall be free from any flaws.
- ➤ Where so specified, special quality glass such as plate glass, wired glass flat glass etc. shall be used. They shall conform to relevant IS standards as regards quality.

Putty for glazing in wooden frames of doors and windows

Putty shall be prepared by mixing one part of white lead with three parts so finely powdered chalk and then adding boiled linseed oil and mixing the whole thing into a homogeneous stiff paste. It shall be free from impurities like dust, grit, etc. and shall conform to IS: 419.

<u>Fittings</u>

The item of wood work of joinery generally includes fittings such as hinges and screws for fixing of door shutters and is explicitly so mentioned in the item.

Hinges

Hinges shall be of iron, brass, aluminum or any other material as specified they shall present a neat appearance and shall operate smoothly. All hinges shall be of steel and

their riveted heads shall be well formed and smooth. Hinges shall be of the type specified and shall conform to the relevant Indian Standard Specifications.

WORKMANSHIP

Wood Work, Wrought, Framed and Fixed

General

The work shall be carried out as per detailed drawings and/or as directed by the Engineer. The wooden members of the frame shall be planed smooth and accurate to the full dimensions. Rebates, rounding, mouldings, etc. as shown in the drawing shall be done before the members are joined into frames. Where wood work is not exposed to view as in the case of frames for false ceiling, however, no planning is required to be done unless specified expressly as rough timber work.

Note: The work wrought shall mean 'planed'

- > Jointing in timber frames must be made carefully and accurately. They shall be strong, neat and shall fit without edging or filling. The joints shall be pinned with hard wood or bamboo pins of 10 to 15-dia after the members of the frame are pressed together in a suitable vice-mechanism
- The door and window frame shall have rebate to house the shutters and the depth of such rebate shall be 1.25 cm.
- ➤ Wood work shall be painted, oiled, polished or otherwise treated as specified. All portions of timber abutting against masonry or concrete portion of building shall be coated with boiling coal tar or other type of approved wood preservatives primer, before placing them in final position.
- ➤ Before any surface treatment is applied in the wood work shall be got approved by the Engineer.

Fixing in Position

The frames shall be fixed only after acceptance by the Engineer. In case of door frames without sills, the vertical members shall be buried in floor for the full thickness of the floor and the door frame shall be temporarily braced at the sill level so as to prevent warping or distortion of frame during construction.

Paneled, Glazed or Paneled and Glazed Shutters

General

The work shall be carried out as per detailed drawing. The wooden members shall be planed smooth and accurate. They shall be cut to the exact shape and sizes without patching or

plugging of any kind. Mouldings, rebates, rounding, etc. shall be done, as shown in the drawing, before the pieces are assembled into the shutter.

Joinery work

- The thickness of the styles and rails shall be as specified in the item of work. The minimum thickness of panels shall normally be 15 mm where the clear width of panel is not more than 300mm and 20 mm where the clear width of the panel is more than 300 mm. However, where the Engineer so considers lesser thickness up to 12 mm and 15 mm respectively may be allowed by him instead of 15 mm and 20 mm specified above. Solid wood panel for door and window shutters shall be made out of one or more strips of timber planks of not less than 125 mm width. It is preferable to use strips of not more than 200 mm width to reduce chances of warping, splitting or other defects. The timber strips shall be joined together with continuous tongued and grooved joints, glued together and reinforced with metal dowels. The grooving of the solid panel shall normally run along the longer dimensions of the panel unless otherwise directed. The corners and edges of panels shall be finished as shown in the drawing and these shall be feather tongued into styles and rails. Sash bars shall have mitres joints with the styles.
- Styles and rails of shutters shall be made out of single piece. Lock and intermediate rails exceeding 200 mm in width if permitted by the Engineer may be made out of one or more pieces of timber but the width of each pieces shall not be less than 125 mm. where more than one piece of timber is used, they shall be joined with a continuous tongued and grooved joint glued together and reinforced with metal dowels (rust proof) at regular intervals of 20 cm or pinned with not less than three 40 mm rust proof pins of the lost head type.
- ➤ The tenons shall pass clear through styles. The styles and rails shall have a 12 mm groove to receive the panel.
- In case the double shutters the rebate at the closing junction of the two shutters shall be of depth not less than 2 cm.
- > Shutter shall not be painted or otherwise treated before these are passed by the Engineer and fixed in position.

Glazing

The glazing work shall be done in accordance with the specification given separately elsewhere.

Hold Fasts

Hold fasts used for fixing doors and window frames shall be made of 40 x 3 mm flat iron and 40 cm long. It shall have two holes on one end for fixing to frame with long screws, and at the other end, the flat iron shall be split and bent at right angles in the opposite direction. The hold fast shall be tightly fixed to the frame by means of bolts, the bolt hole

in frame being plugged suitably and finished neat. The hold fast shall be embedded into masonry by concrete block of 200 x 250 x 400 mm size.

FLUSH DOOR SHUTTERS

General

The door shall be of flush type solid core with single or double shutter as the case may be.

Frames

Pressed steel door frames for flush doors shall be out of 1.25 mm thick mild steel sheets of profiles as per IS:4351.

Hot rolled steel sections for the fabrication of steel doors, windows and ventilators shall conform to IS: 7452, which are suitable for single glazing.

Transparent sheet glass shall conform to the requirements of IS: 2835. Wired and figured glass shall be as per IS: 5437.

Builder's hardware of fittings and fixtures shall be of the best quality from approved manufacturers.

Fabrication of the units shall be with rolled sections, cut to correct lengths and mitered. Corners shall be welded to form a solid fused welded joint conforming to the requirements of IS: 1038. Tolerance in overall dimensions shall be within \pm 1.5mm. The frames shall be free from warp or buckle and shall be square and truly plane. All welds shall be dressed flush on exposed and contact surfaces. Punching of holes, slots and other provisions to install fittings and fixtures later shall be made at the correct locations as per the requirements. Samples of the units shall be got approved by the Engineer before further manufacture/purchase by the Contractor.

Pressed steel door frames shall be provided with fixing lugs at each jamb, hinges, lock-strike plate, mortar guards, angle threshold, shock-absorbers of rubber or similar material as per the requirements of IS:4351. Pressed steel door frames shall be fixed as 'built-in', as the masonry work proceeds. After placing it plumb at the specified location, masonry walls shall be built up solid on either side or each course grouted with mortar to ensure solid contact with the door frame, without leaving any voids. Temporary struts across the width shall be fixed, during erection to prevent bow/sag of the frame.

Steel doors, windows and ventilators shall be provided with finish of either painting as specified or shall be hot dip galvanized with thickness of zinc coating as stipulated all as described in the respective items of work.

Installation of the units with fixing lugs, screws, mastic caulking compound at the specified locations shall generally conform to the requirements of IS:1081. Necessary holes etcrequired for fixing shall be made by the Contractor and made good after installation. Workmanship expected is of a high order for efficient and smooth operation of the units.

Shutters 5

The shutters shall be decorative or non-decorative type of the exterior or interior grade as described in the item and as shown in the drawings. It shall conform to the relevant specifications for the type and grade given in I.S. 2202/1983, specifications for Wooden Flush door shutter (solid core type). The finished thickness shall be as mentioned in the item. Face veneers used shall be of the pattern and colour approved by the Engineer.

Fixtures And Fastenings

- These shall be as shown in table on the drawings or as indicated in the specifications. Where it is not specified they shall be oxidized brass and shall be of good workmanship. All fixtures and fastenings shall be sound and strong. They shall be sectional and of the best quality. The size, shape, design and finish shall be as shown on drawings and approved by the Engineer.
- ➤ Unless otherwise specified each leaf shall be hung with four hinges with screws. Each door shall be furnished with tower bolt, aldrop and latch, brass flush bolts, etc. the fixtures shall comply with the relevant Indian standards. Samples of all fixtures and fastening shall be got approved by the Engineer and deposited in his office for reference.
- All the fixtures shall be fixed to the joinery in a secure and efficient manner. Metal sockets shall be provided to all bolts where the shoots enter, stone, concrete

4. LIST OF MAKES AND PRODUCTS

SCOPE

- All materials and products shall conform to the relevant standards and shall be of approved make and design. A list of manufacturers/ vendors is given separately herein below for guidance. The Engineer shall give the approval of a manufacturer/ vendor/ only after review of the sample/ specimen. In case the same is not available in the market or in case of change in trade name, equivalent makes/ re-designated manufacturer then an equivalent approved make shall be used with the approval of Owner/ Engineer. The complete system and installation shall also be in conformity with applicable Codes & Standards and Tender specifications.
- > Only "First" class quality materials shall be used.
- > Owner reserves the right to choose any of the approved make / vendors as per this list.
- In case of products not indicated in this list, bis marked products shall be preferred.
- Specification of manufacturer's item shall be checked against tender item / specifications before selecting any product or brand name. In case of any discrepancy, tender item/ specifications shall prevail, and any such brand of item shall not be used which is not conforming to tender specifications even if it is listed in this list.

- For use of material from a bis listed/ certified manufacturer, the contractor shall furnish a copy of the valid bis certificate to eil/ owner before procuring the material.
- In case non-availability of any item/ material among approved manufacturers/ brands at a particular site/ region, alternate manufacturers/ brands conforming to BIS/ BS etc. shall be used subject to approval by owner.
- In case of non-availability of any manufacturer among approved manufacturers at a particular site/region, alternate manufacturer's name shall be proposed along-with required credentials for owner's approval.
- In case of any item/ product neither covered in this list nor having A BIS specifications, the contractor shall submit the proposed item/ product along-with technical details/ specifications (as per bid), test certificates etc. And other credentials of the manufacturer for owners approval.
- > LIST OF APPROVED MAKES FOR PRODUCTS AND MATERIALS FOR CIVIL AND FINISHING WORKS ARE INDICATED IN THE TABLE BELOW. HOWEVER, ANY OTHER MAKE WHICH IS EQUIVALENT AND MEETING THE TENDER SPECIFICATIONS ARE ALSO ACCEPTABLEWITH PRIOR APPROVAL OF THE ENGINEER..

SR. NO.	DETAILS OF MATERIALS	MANUFACTURER'S NAME
1.	CEMENT	ACC / ULTRATECH / JK / C K BIRLA / AMBUJA / BINANI / JSW / SANGHI / INDIA CEMENT.
2.	WHITE CEMENT	JK / BIRLA WHITE / TRAVANCORE CEMENT
3.	READY MIX CONCRETE	ULTRATECH / ACC / RMCRIPL / JK CEMENT / UNITECH / GRASIM / LAFARGE / GODREJ & Boyce / Madras Cement / RMC Readymix (I) /
4.	REINFORCEMENT BARS	SAIL/ TISCON/ RINL/ IISCO/ JSW
5.	STRUCTURAL STEEL	SAIL/ TISCON/ RINL/ IISCO/ JSW / CHORUS
6.	ANTI TERMITE TREATMENT	CHLOROPYRIPHOUS CHEMICAL PECOPP DE-NOCIL, CYNAMIDE
7.	BLOCK BOARD / FLUSH	DURA-BOARD / KIT PLY / MERINO PLY

SR. NO.	DETAILS OF MATERIALS	MANUFACTURER'S NAME
	DOORS	ISI MARKED / KUTTY, INDIA PLYWOOD, MYSORE PLYWOOD,
		ALL MANUFACTURERS LISTED BY BIS UNDER IS:2202 (HAVING OPERATIIVE AND VALID LICENSE) AT BIS WEB SITE HTTP://WWW.BIS.ORG.IN/
8.	PLYWOOD	ALL MANUFACTURERS LISTED BY BIS UNDER IS:303 (HAVING OPERATIIVE AND VALID LICENSE) AT BIS WEB SITE HTTP://WWW.BIS.ORG.IN/
9.	WATERPROOF PLY	GREEN PLY, GARNET, CENTURY
10.	COMMERCIAL PLY	GARNET, CENTURY, DONEAR, GREEN PLY
11.	LAMINATES	ALL MANUFACTURERS LISTED BY BIS UNDER IS:2406 (HAVING OPERATIIVE AND VALID LICENSE) AT BIS WEB SITE HTTP://WWW.BIS.ORG.IN/
		RAMMICA INDUSTRIES; THE BOMBAY BURMAH TRADING CORPN.; GREENLAM, CENTURY, MERINO
12.	MDF BOARDS	NUCHEM LTD; MANGALAM TIMBER PRODUCTS LTD; WESTERN BIO SYSTEM LTD; BAJAJ ECO-TEC PRODUCTS LIMITED
13.	VENEER	DURO, GREEN, DONEAR, CENTURY
14.	PARTICLE BOARD (PLAIN / VENEERED / PRE- LAMINATED)	ALL MANUFACTURERS LISTED BY BIS UNDER IS:3087 (HAVING OPERATIIVE AND VALID LICENSE) AT BIS WEB SITE HTTP://WWW.BIS.ORG.IN/
15.	PRE-LAMINATED PARTICLE BOARD	NOVOPAN/ MERINO/ ANCHORLAM/ BHUTAN BOARD
16.	WOODWORK POLISHING	ASIAN PAINTS; SHALIMAR PAINTS
17.	TERRAZZO TILES	NITCO; HINDUSTAN; NEC; BHARAT; NIMCO; GK BANSAL;
18.	VITRIFIED TILES	NAVEEN, MARBO GRANIT,

SR. NO.	DETAILS OF MATERIALS	MANUFACTURER'S NAME
		GRANAMITE, BOSS, NITCO, ASIAN, RAK, EURO, SOMANY, BELL CERAMIC, KAJARIA, REGENCY, ORIENT, JOHNSON; PELICAN, VARMORA, PILKINGTON
19.	GLAZED TILES	ORIENT, KAJARIA, NITCO, SOMANY, BELL, JOHNSON, ASIAN, RAK, EURO, PARSHURAM POTTERY, PILKINGTON
20.	CERAMIC TILES	REGENCY, KAJARIA, ORIENT, BELL, SOMANY, JOHNSAON, SPARTEK, NAVEEN, BELL, VARMORA, PILKINGTON
21.	ACID / ALKALI RESISTANT TILES	REGENCY, ENDURA, KOTHARI, CHORAMANDALAM, RUSTILE, ARCOY, PERFECT ACID WARES/ MAHAKOSHAL POTTERIES/ CHAMPION CERAMICS, GOODEARTH MINERALS
22.	PVC TILES/ ROLLS	ALL MANUFACTURERS LISTED (HAVING OPERATIIVE AND VALID LICENSE) BY BIS AT BIS WEB SITE HTTP://WWW.BIS.ORG.IN/ EXCELEN BY ARMSTRONG; MARBLEX BY BHOR INDUSTRIES SHYAM VINYL
23.	PVC TILES/ ROLLS (ANTI-STATIC)	SOLIDLG1 BY ARMSTRONG; ANSTAT BY PREMIER POLYFILMS LTD
24.	RUBBER TILE FLOORING	ECOFLEX SURFACES PVT. LTD., RUDI SPORTS SURFACES, THE FLOORSMITHS
25.	STAINLESS STEEL SECTIONS	JINDAL/ SAIL/ GOLDEN
26.	ALUMINIUM SECTIONS	HINDALCO/ JINDAL/ MAHAVIR/ LNDAL / AJIT INDIA / ALUMILITE
27.	PRESSED STEEL DOORS AND WINDOWS	SKS STEEL IND., DHIMAN STEEL SUPER STEEL WINDOWS, RDG ENGINEERING, ANAND INDUSTRIES, RAYMUS ENGINEERING,

SR. NO.	DETAILS OF MATERIALS	MANUFACTURER'S NAME					
		NICOMAC, WINDOORS, SHAKTIMET, NCL SECOLOR, GODREJ, SENTINAL, MULTIWIN					
28.	ALUMINIUM DOORS AND WINDOWS	JINDAL; HINDALCO, AJIT INDIA, ALUMILITE					
29.	FIRE PROOF DOORS	SHAKTIMET, SHIRKE POLYNORM, VIPER BY NAVAIR INTERNATIONAL, RADIANT BY RDG ENGG., GANDHI AUTOMATION, PROMAT, GODREJ, ADHUNIK, SIGNUM					
30.	INDUSTRIAL DOORS / GATES (FOLDING, SLIDING, SWING DOORS)	GANDHI AUTOMATION; NICOMAC; AVIANS;					
31.	ROLLING SHUTTERS (MANUAL / GEAR OPERATED / MOTORIZED)	TECHNO SYSTEMS DOOR SOLUTION AEGIS; SHAKTIMET; GAND AUTOMATION; DORPLUS; SWAST ROLLING SHUTTERS; BENGE ROLLING SHUTTERS;					
32.	DOOR HARDWARE	INGERSOL RAND, GEZE, DORMA, GUARDIAN, DORSET, MAGNUM, UNION, KITCH					
33.	MORTICE LOCKS WITH HANDLES	GODREJ & BOYCE; EVERITE AGENCIES; GOLDEN INDUSTRIES					
34.	MISC. DOOR HARDWARE / FITTINGS (HINGES, TOWER BOLTS, LATCHES, STOPPERS ETC.	ALL MANUFACTURERS LISTED BY BIS UNDER IS:3087 (HAVING OPERATIIVE AND VALID LICENSE) BY BIS AT BIS WEB SITE HTTP://WWW.BIS.ORG.IN/ EVERITE; EBCO; ECIE; HARDWYN					
35.	NUTS BOLTS/ SCREWS	KUNDAN/ PUJA/ ATUL					
36.	ANODISED ALUMINIUM FITTINGS	CROWN/ ALANS/ CLASSIC/ BHARAT/ ARGENT					
37.	MILD STEEL BUTT HINGES/ PIANO HINGES	JOLLY/ GARG/ AMIT/ASI SUPREME					
38.	HYDRAULIC DOOR CLOSERS (OVERHEAD AND	ALL MANUFACTURERS LISTED BY BIS UNDER IS:3087 (HAVING OPERATIVE					

SR. NO.	DETAILS OF MATERIALS	MANUFACTURER'S NAME
	FLOOR MOUNTED)	AND VALID LIECENSE) AT BIS WEBSITE HTTP://WWW.BIS.ORG.IN
		DOORKING
39.	CLEAR FLOAT GLASS	AIS GLASS/ SAINT GOBAIN/ MODIGUARD
40.	GLASS (TOUGHENED)	SAINT GOBAIN/ MODI FLOAT/ ASAHI FLOAT
41.	POLYCARBONATE SHEET	DANPALON/ ALCOX/ POLYGAL
42.	HDPE WATER SUPPLY PIPES	DURALINE/ ORIPLAST/ HALLMARK/ PIONEER / SUPREME
43.	FIRE RETARDANT PAINT	JOTUN, HILTI, AKZONOBEL, ASIAN PPG, CHEMBOND COATINGS; HITAKSHI SAFETY SOLUTIONS; AKZO NOBEL
44.	PLASTIC / ACRYLIC EMULSION PAINT (INTERNAL & EXTERNAL), DISTEMPER	ICI; BERGER; ASIAN PAINTS; SHALIMAR; KANSAI NEROLAC; JOTUN; ACROPAINTS; GODAVARI PAINTS; N E PAINT UDYOG; SURFA COATS
45.	SYNTHETIC ENAMEL PAINT FOR BUILDING WORKS	ICI; BERGER; ASIAN PAINTS; SHALIMAR; KANSAI NEROLAC; JOTUN; ACROPAINTS; GODAVARI PAINTS; N E PAINT UDYOG; SURFA COATS
46.	WATER-PROOF CEMENT PAINT	KILLIC NIXON (SNOWCEM); GODAVATI PAINTS (SUPREMECEM); ACRO PAINTS (ACROCEM); SNOW EHITE INDUSRIAL CORP (SUPERCEM); RAJDOOT PAINTS (XTRACEM 76 SUPERIOR CEMENT PAINT)
47.	DECORATIVE TEXTURED PAINT	LUXTURE SURFACE COATINGS PVT LTD (LUXTURE); BAKELITE HYLAM LTD (HERITAGE); NCL ALLTEK & SECCOLOT LTD (ALLTEK); ACRO PAINTS LTD (ACROTEXTURES); UNITILE; SPECTRUM PAINTS; SURFA COATS

SR. NO.	DETAILS OF MATERIALS	MANUFACTURER'S NAME				
48.	ANTI CORROSIVE BITUMASTIC PAINT	ASIAN PAINTS / BERGER / J&N				
49.	PRECOATED PROFILES GI / GALVALUME / ZINCALUME SHEETS	LLYOD INSULATION INTERARCH BUILDING PRODUCTS MULTICOLOR STEEL PVT LTD HARDCASTLE & WAUD MFG CO. LTD JAPAN METAL BUILDING SYSTEM PVT LTD TATA BLUESCOPE STEEL LTD SHREE PRE-COATED STEEL LTD CRIL				
50.	CGI SHEETS	ISPAT INDUSTRIES / SAIL / TATA STEEL /				
51.	ALUMINIUM SHEETS	HINDALCO; JINDAL ALUMINIUM LTD				
52.	FIBRE GLASS SHEET	SIMBA FRP PVT LTD				
53.	POLYCARBONATE SHEET	DANPALON, ALCOX, POLYGAL, V. A. CORPORATION, JOY FAB, YADAV ENGINEERING				
54.	EPOXY COATINGS	FOSROC (NITOFLOOR SL 2000 / 1000); SIKA; BUILDTECH PRODUCTS PVT LTD; CICO TECHNOLOGIES; ASIAN PPG; BASF; SUNANDA SPECIALITY CHEMICALS; CHRYSO; KOTHARI CORROSION CONTROLLERS; AKZO NOBEL; BOSTIK; APURVA INDIA LTD.; CHEMBOND COATINGS.				
55.	FLOOR HARDENERS	CICO; SAMCOCK CHEMICALS; PEE ESS PROCESSOR & TRADERS; IRONOTE; BASF; CHRYSO; BASF; SUNANDA SPECIALITY CHEMICALS; FOSROC; BOSTIK; POLYFLEX COATINGS AND LININGS				
56.	WATER PROOFING COMPOUNDS	BASF; SIKA; CICO; SUNANDA SPECIALITY CHEMICALS; FAIRMATE; PIDILITE; CHRYSO; XYPEX; IMPERMO; PENETRON; ALCHIMICA; BOSTIK; MC				

SR. NO.	DETAILS OF MATERIALS	MANUFACTURER'S NAME				
		BOUCHIME; SURFA COATS; LIKPROOF; KRYPTON BUILDMAT;				
57.	CONCRETE ADMIXTURES	BASF; SIKA; COCO; SUNANDA SPECIALITY CHEMICALS; FAIRMATE; PIDILITE; CHRYSO; XYPEX; IMPERMO; PENETRON; ALCHIMICA; BOSTIK; MC BOUCHIME; ACC				
58.	POLYSULPHIDE / POLYURETHANE / SILICON / SEALANTS	CHOWKSEY CHEMICALS CICO TECHNOLOGIES FOSROC; BASF; SIKA; PIDILITE; CHEMETALL-RAI; CHRYSO; BOSTIK;				
59.	BITUMEN SEALANT	STP				
60.	CONSTRUCTION CHEMICALS	BASF; SIKA; COCO; SUNANDA SPECIALITY CHEMICALS; FAIRMATE; PIDILITE; CHRYSO; XYPEX; IMPERMO; PENETRON; ALCHIMICA; BOSTIK; MC BOUCHIME; ACC.				
61.	ELECTRO-FORGED GRATING	GREATWELD GRATINGS PVT LTD INDIA GRATINGS PVT LTD				
62.	FALSE / RAISED FLOORING	UNITED INSULATION LLOYD INSULATIONS MULTIFLOORS A R BROTHERS BESTLOCKS SYSTEM & CONCEPTS DG FLOOR UNIFLOOR				
63.	GYPSUM BOARD	SAINT-GOBAIN GYPROC INDIA LTD LAFARGE DRYTECH				
64.	UNDER-DECK INSULATIONS	BEKELITE HYLAM LTD LLOYD INSULATION UP TWIGA FIBRE GLASS LTD ROCKWOOL INDIA LTD				
65.	OVER-DECK INSULATIONS	LLOYD INSULATION				

SR. NO.	DETAILS OF MATERIALS	MANUFACTURER'S NAME						
		UP TWIGA FIBRE GLASS LTD						
		ROCKWOOL INDIA LTD						
		BEST PLASTRONICS						
66.	PVC WATER STOPS	OMAI PLASTICS, BASECON PASK, ASIAN ENGG PRODUCTS, CAPRIHANS INDIA LTD, R.C ENTERPRISES, FIXOPAN, WATERSEAL INDIA LIMITED						
67.	EXPANSION JOINT BOARDS	SHALITEX, STP LTD, LLLOYD INSULATION, SUPREME INDUSTIES						
68.	WATER BARS	HYDROTITE, BASF, HYDROSWELL						
69.	GROUT	BASF, FOSROC, SUNANDA SPECIALITY COATINGS, BOSTIK, SIKA,						
70.	PVC COVER BLOCKS	ISHITA ENTERPRISES						
71.	APP MEMBRANE	LLOYD INSULATIONS BUILDTECH PRODUCTS PVT LTD CICO; SIKA; SHALIMAR TAR PRODUCTS; IWL INDIA LTD, PURE LEATHERS PVT LTD						
72.	EPDM GASKETS	ANAND/ ROOP/ BOHRA/ HANU						
73.	PARQUET FLOOR	NEMO/ PRIMA/ PERGO						
74.	MINERAL FIBRE BOARD CEILING	LLOYD/ NITTOBO/ ARMSTRONG						
75.	GYPSUM BOARD	SAINT GOBAIN, LAFARGE						
76.	WEATHER SILICON MAKE AND GRADE	DOW CORNING/ MOMENTIVE (GE)						
77.	ADHESIVES	BAL, LATICRETE, KERAKOLL, PIDILITE						
78.	FIRE SMOKE SEAL	HILTI, CFS, SPWB JOINTS SPRAY						
79.	AAC BLOCKS	BILT INDUSTRIES PVT. LTD., AEROCON, SIPOREX INDIA LIMITED, XTRALITE						

SR. NO.	DETAILS OF MATERIALS	MANUFACTURER'S NAME			
80.	ACOUSTIC INSULATION	U.P. TWIGA LTD. LLOYD, SAINT GOBAIN, ECOPHONE			
81.	ANCHOR FASTENERS/ BOLTS	HILTI, FISCHER, HALFEN			
82.	TENSILE FABRIC SYSTEM	FERRARI, MEHLER, MAKMAX			
83.	MASKING TAPES	3M, SUN CONTROL/ WONDER POLYMER			
84.	INTERLOCKING CONCRETE BLOCKS	VYARA TILES PVT. LTD SUPER DECORATIVE FLOORINGS PVT. LTD., SAI ENTERPRISES, HINDUSTAN TILES, NIMCO PREFAB, R.K. TILES.			

<u>Drawings</u>

Listed below drawings forms part of this annexure.

Drawing No.	Title
TCE.10106A-100-GA-6002	BOUNDARY WALL DETAILS FOR SLOPING TERRAIN.
TCE.10106A-186-GA-6000	GENERAL ARRANGEMENT OF GUARD HOUSE AND CHANGING ROOM
TCE.10106A-100-GA-6001	BOUNDARY WALL DETAILS
TCE.10106A-100-AC-5427	GUARD HOUSE – PLAN, ELEVATION & SECTION
TCE.10106A-100-AC-5428	BOUNDARY WALL – PLAN, ELEVATION & SECTION
TCE.10106A-100-AC-5429	ENTRANCE GATE – PLAN, ELEVATION & SECTION
TCE.10106A-100-AC-5430	GUARD BLOCK – ELEVATION & SECTION

All the above drawings are attached as annexure I-B separately.

Annexure - 2

Format of certificate

Certified constructi											-	
with the C	GFC dr	awing	s and t	echnical	specific	ations	as speci	fied in	the Cor	tract.		
									Sign	nature		
									U	z Designat	tion	
										l address)		
Place:												
Date:												

Office seal

Form of Bid Security (Bank Guarantee)

[Guarantor letterhead or SWIFT identifier code]

Beneficiary:

[Insert name and address of the Employer]

Invitation for Bids No: _[Insert reference number for the Invitation for Bids]

Date:[Insert date of issue]

BID GUARANTEE No.:[Insert guarantee reference number]

Guarantor: _[Insert name and address of place of issue, unless indicated in the letterhead]

We have been informed that [insert name of the Bidder, which in the case of a joint venture shall be the name of the joint venture (whether legally constituted or prospective) or the names of all members thereof] (hereinafter called "the Applicant") has submitted or will submit to the Beneficiary its bid (hereinafter called "the Bid") for the execution of [insert description of contract] under Invitation for Bids No. [insert number] ("the IFB").

Furthermore, we understand that, according to the Beneficiary's conditions, bids must be supported by a bid guarantee.

At the request of the Applicant, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of [insert amount in letters] (insert amount in numbers) upon receipt by us of the Beneficiary's complying supported by the Beneficiary's statement, whether in the demand itself or a separate signed document accompanying or identifying the demand, stating either that the Applicant:

- (a) has withdrawn its Bid during the period of bid validity specified by the Applicant in the Letter of Bid, or any extension thereto provided by the Applicant; or
- (b) having been notified of the acceptance of its Bid by the Beneficiary during the period of bid validity, (i) fails to execute the Contract Agreement or (ii) fails to furnish the performance security, in accordance with the Instructions to Bidders ("ITB") of the Beneficiary's bidding document.

This guarantee will expire: (a) if the Applicant is the successful Bidder, upon our receipt of copies of the contract agreement signed by the Applicant and the performance security issued to the Beneficiary upon the instruction of the Applicant; and (b) if the Applicant is not the successful Bidder, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the bidding process; or (ii) twenty-eight days after the Validity Period, which date shall be established by presentation to us of copies of the Letter of Bid and any extension(s) thereto, accompanied by the bidding document; or (c) three years after the date of issue of this guarantee.

Consequently, any demand for payment under this guarantee must be received by us at the office indicated above on or before that date.
<u></u>
[signature(s)]
Note: All italicized text is for use in preparing this form and shall be deleted from the final product.

BANK GUARANTEE FOR ADVANCE PAYMENT

To:	[name of Employer]
	[address of Employer]
	[name of Contract]
Gentlemen:	
above-mentioned Contract, <i>Contractor</i>] (hereinafter called <i>[name of Employer]</i> a bank goald Clause of the Contract,	he provisions of the Conditions of Contract, sub clause 3.1 of the
Contractor, agree uncondition Surety merely, the payment to without whatsoever right of or	[bank or financial institution], as instructed by the nally and irrevocably to guarantee as primary obligator and not as o [name of Employer] on his first demand objection on our part and without his first claim to the Contractor, in eeding [amount of guarantee]^1 [in words].
Contract or of Works to be po	no change or addition to or other modification of the terms of the erformed thereunder or of any of the Contract documents which may [name of Employer] and the Contractor, shall in any bility under this guarantee, and we hereby waive notice of any such zion.
	remain valid and in full effect from the date of the advance payment [name of Employer] receives full nt from the Contractor.
	Yours truly,
	Signature and seal: Name of Bank/Financial Institution: Address: Date:

67

An amount shall be inserted by the bank or financial institution representing the amount of the Advance Payment, and denominated in Indian Rupees.

Performance bank guarantee

	[name of Employer]
	[address of Employer]
WHEREAS	[name and address of Contractor] (hereinafter
called "the Contractor") has undert	aken, in pursuance of Contract No dated
to execute	[name of Contract and brief called "the Contract");
description of Works] (hereinafter	called "the Contract");
	stipulated by you in the said Contract that the Contractor shall furnish gnized bank for the sum specified therein as security for compliance the Contract;
AND WHEREAS we have a	greed to give the Contractor such a Bank Guarantee;
	eby affirm that we are the Guarantor and responsible to you, a total of[amount of
guarantee] ¹	[in words], such sum being payable in the types
and proportions of currencies in wh	hich the Contract Price is payable, and we undertake to pay
	d and without cavil or argument, any sum or sums within the
	[amount of guarantee] as aforesaid without your needing to
prove or to show grounds or reason	ns for your demand for the sum specified therein.
We hereby waive the necessi presenting us with the demand.	ity of your demanding the said debt from the Contractor before
We further some that no shor	nge on addition to an other modification of the terms of the
Contract or of the Works to be perf may be made between you and the	nge or addition to or other modification of the terms of the formed thereunder or of any of the Contract documents which Contractor shall in any way release us from any liability by waive notice of any such change, addition or modification.
This guarantee shall be valid Period.	until 45days from the date of expiry of the Defects Liability
1011001	
Signature	e and seal of the guarantor
Name o	of Bank
	Address
	Date

An amount shall be inserted by the Guarantor, representing the percentage of the Contract Price specified in the Contract including additional security for unbalanced Bids, if any and denominated in Indian Rupees.

Section C. World Bank Policy on Corrupt and Fraudulent Practices

Guidelines for Procurement of Goods, Works, and Non-Consulting Services under IBRD Loans and IDA Credits & Grants by World Bank Borrowers, dated January 2011.

"Fraud and Corruption:

- 1.16 It is the Bank's policy to require that Borrowers (including beneficiaries of Bank loans), bidders, suppliers, contractors and their agents (whether declared or not), sub-contractors, sub-consultants, service providers or suppliers, and any personnel thereof, observe the highest standard of ethics during the procurement and execution of Bank-financed contracts. In pursuance of this policy, the Bank:
 - (a) defines, for the purposes of this provision, the terms set forth below as follows:
 - (i) "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
 - (ii) "fraudulent practice" is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
 - (iii) "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
 - (iv) "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
 - (v) "obstructive practice" is
 - (aa) deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation, or
 - (bb) acts intended to materially impede the exercise of the Bank's inspection and audit rights provided for under paragraph 1.16(e) below.
 - (b) will reject a proposal for award if it determines that the bidder recommended for award, or any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
 - (c) will declare mis procurement and cancel the portion of the loan allocated to a contract if it determines at any time that representatives of the Borrower or of a recipient of any

part of the proceeds of the loan engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices during the procurement or the implementation of the contract in question, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur, including by failing to inform the Bank in a timely manner at the time they knew of the practices;

- (d) will sanction a firm or individual, at any time, in accordance with the prevailing Bank's sanctions procedures, including by publicly declaring such firm or individual ineligible, either indefinitely or for a stated period of time: (i) to be awarded a Bank-financed contract; and (ii) to be a nominated sub-contractor, consultant, supplier, or service provider of an otherwise eligible firm being awarded a Bank-financed contract;
- (e) will require that a clause be included in bidding documents and in contracts financed by a Bank loan, requiring bidders, suppliers and contractors, and their sub-contractors, agents, personnel, consultants, service providers, or suppliers, to permit the Bank to inspect all accounts, records, and other documents relating to the submission of bids and contract performance, and to have them audited by auditors appointed by the Bank.

Section D: Annexures.

Annexure: A

Format for Work performed as prime Contractor (in the same Name) on works of similar nature in the last three financial year

	Project Name	Name of Employer	Description of work		Date of issue of work order	Stipulated period of completion	completion	Remarks explaining reasons for delay and work completed
2012-13								
2013-14								
2014-15								

Copies of the contracts to be enclosed.

Annexure: B
Format for Existing Commitments and on-going works

Description of Work	Place & State	Contract No. & Date	Value of Contract (Rs. Lakh)	Stipulated period of completion (5)		Anticipated date of completion (7)
(1)	(2)	(3)	(4)		(0)	(7)

^{*} Enclose a certificate from Engineer concerned.